INTERNATIONAL MONETARY FUND

Economic Impact of G20 Compact with Africa Initiative on Member Countries

Edward R. Gemayel, Asel Isakova, Vidhi Maheshwari

WP/25/189

2025
SEP

WORKING PAPER

 WP/25/189

IMF Working Paper
African Department

Economic Impact of G20 Compact with Africa Initiative on Member Countries

Prepared by Edward R. Gemayel, Asel Isakova, Vidhi Maheshwari

Authorized for distribution by Edward R. Gemayel
September 2025

ABSTRACT: The Compact with Africa (CwA) is an initiative launched in 2017 under Germany's G20 Presidency to promote private investment in Africa through creating a more attractive environment for private investment through policy reforms and improved macroeconomic and business frameworks in member countries. This paper attempts to quantify the impact of CwA membership on FDI inflows. We employ the entropy balancing methodology to improve the credibility of a causal inference between CwA membership and FDI inflows. While we could not conclusively establish causality, our analysis offers other useful insights. Inward FDI data suggests that CwA countries have experienced stronger FDI inflows on average, including during the pre-CwA years. Furthermore, these countries tend to have stronger institutions, better infrastructure and human development, which are among the key factors that help attract FDI to developing countries. Hence, continued efforts of African governments to implement structural reforms, strengthen institutions, improve infrastructure and develop human capital are vital to create an attractive FDI environment, while the CwA initiative could provide a platform for peer-to-peer learning and exchange, capacity building, policy dialogue and collaboration.

JEL Classification Numbers:	F21, F43, N17, O55
Keywords:	Compact with Africa; Foreign Direct Investment
Author's E-Mail Address:	egemayel@imf.org, aisakova@imf.org, vmaheshwari@imf.org

WORKING PAPERS

Economic Impact of G20 Compact with Africa Initiative on Member Countries

Prepared by Edward R. Gemayel, Asel Isakova, Vidhi Maheshwari [1]

[1] The authors would like to thank Catherine Patillo, Suchanan Tambunlertchai, Felix Vardy, Youssouf Kiendrebeogo, Tito Nicias Teixeira da Silva Filho, and Rayner Brett for their helpful comments and discussions. The views expressed in this paper are the sole responsibility of the authors and should not be attributed to the International Monetary Fund, its Executive Board, or its management. All errors are our own.

Contents

FIGURES

TABLES

I. Introduction

The Compact with Africa (CwA) is an initiative launched in 2017 under Germany's G20 Presidency to promote private investment in Africa. The initiative's key objective is to create a more attractive environment for private investment through policy reforms and improved macroeconomic and business frameworks in member countries. CwA initiative aims to promote collaboration between African countries, international organizations and G20 member states, to coordinate country-specific reform agendas, support respective policy measures and advertise investment opportunities to private investors. While complementing other economic partnership and trade initiatives in Africa, the CwA is distinct in its targeted approach to enhancing private investment through country-specific reform compacts, focused policy dialogue, and coordination with G20 partners and international financial institutions.

The initiative is demand-driven and open to all African countries. Since its inception in 2017fourteen African countries have joined the initiative. These are Benin, Burkina Faso, Côte d'Ivoire, Democratic Republic of the Congo (DRC), Egypt, Ethiopia, Ghana, Guinea, Morocco, Rwanda, Senegal, Togo, Tunisia, and Zambia. The platform supports the formulation of reform agendas by providing technical assistance, structured policy dialogue, and peer engagement, enabling participating countries to design and implement tailored, investment-focused reforms with international support.

The CwA initiative targets foreign direct investment (FDI) because such capital inflows are beneficial for economic growth and development. They can provide capital, technology, and expertise that can enhance productivity and competitiveness. They create jobs, improve infrastructure, and boost domestic industries by fostering innovation and efficiency. FDI also strengthens global trade connections, integrating local economies into international markets. Additionally, it contributes to government revenues through taxes and improves the balance of payments by increasing foreign exchange reserves. For developing countries, in particular, FDI serves as a vital source of funding and economic diversification, reducing dependency on traditional exports or aid.

The inflows of FDI to Africa have increased substantially, growing by approximately factor of eight in real terms from the 1990s to the present (Figure 1). FDI inflows in Africa experienced the fastest rate of growth in the 1990s and have since continued growing albeit at a slower pace. However, the region's share in the total world (net) FDI inflows remains low at around 3.5 percent (Figure 2), despite the large investment and market opportunities and the potentially higher rate of return that the region could offer. FDI inflows to CwA member countries have indeed increased relative to pre-CwA period, and have experienced a steeper increase in inward FDI and received higher FDI on average relative to non-CwA countries, although this difference between the two groups can be equally observed in the period before the CwA initiative. Excluding Egypt as the largest economy and the primary recipient of FDI in the CwA group reduces the difference between the two groups. Nonetheless, FDI data suggest that the CwA countries have experienced somewhat larger and less volatile FDI inflows from 2017 to the present compared to others on average (Figures 3 and 4).

This paper attempts to quantify the impact of CwA membership on FDI inflows. Has the CwA initiative helped its members attract investment? Our results and policy discussion can help policymakers both in receiving and

investing countries to better understand the effects of CwA, analyze key determinants of FDI in Africa and refine measures and strategies to enhance private sector participation and FDI in the region.

Our empirical assessment relies on a sample of 42 countries in Africa over the period of 1990-2023. We use the entropy balancing methodology which allows addressing the issue of identification in policy evaluation, which in our case is the impact of the CwA initiative on FDI inflows in member countries.

The rest of the paper is organized as follows. Section 2 provides a literature overview. Section 3 discusses the empirical methodology. Section 4 presents the data. Section 5 discusses the key empirical results and Section 6 provides a policy discussion.

Figure 1. Net FDI inflows to Africa
(Billion US$, at constant prices)

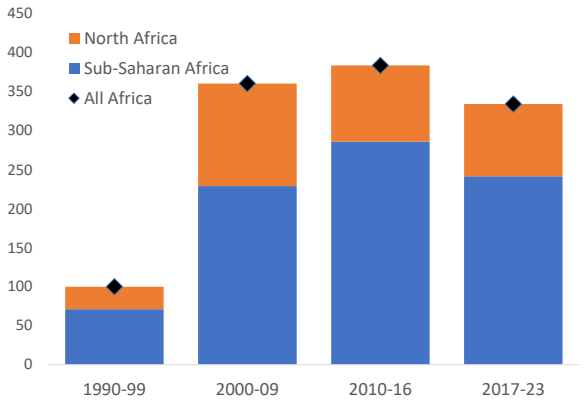


Figure 2. Net FDI inflows, by region
(Billion US$, at constant prices)

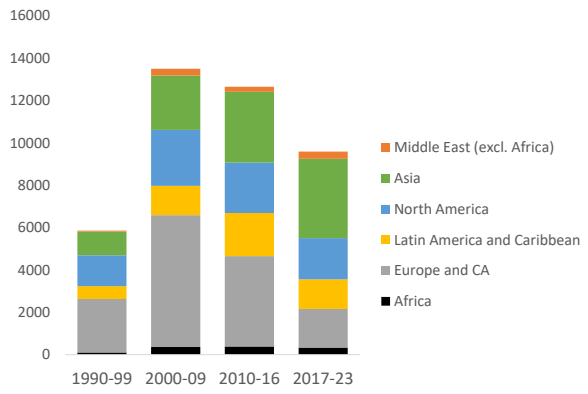


Figure 3. FDI inflows to CwA members
(Billion US$, at constant prices)

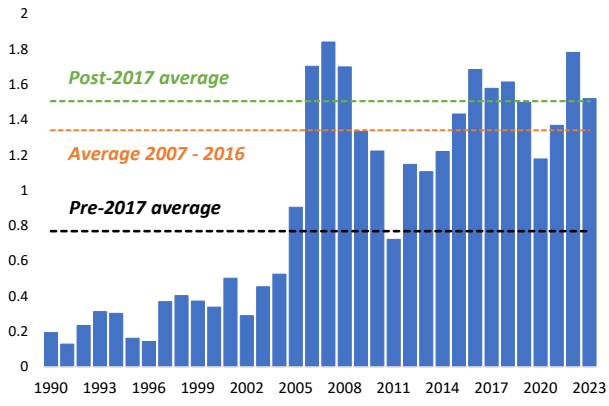
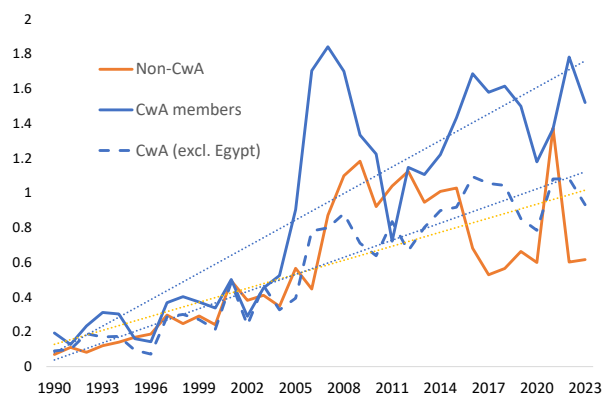


Figure 4. FDI inflows to CwA and non-CwA
(Billion US$, at constant prices, average)



Source: UNCTAD, Authors' Calculations

II. Literature Review

FDI and Macroeconomic Performance

FDI inflows have become the largest sources of external financing in developing countries. World Bank (2018) discusses that for many developing countries, FDI inflows exceed official development assistance, providing financial resources for investment, in particular, in countries with limited domestic funds and high cost of other sources of external financing.

FDI can benefit economic growth and development in host countries. For example, Emako et al. (2023) find that FDI inflows do have a positive impact on capital formation in developing countries, contributing to their economic potential. According to the OECD (2002), FDI can influence growth via their impact on total factor productivity, greater integration of the host country into the global trade, technology transfer, human capital development, improved corporate governance, and stronger competition. Borensztein et al. (1998) study a sample of 69 developing countries and find that FDI inflows have a stronger positive impact on economic growth compared to domestic investment. Aeynew (2022) studies the impact of FDI on growth in SSA countries and finds that there is a favorable impact on the region's long-term economic growth. Furthermore, Aust et al. (2020) study a sample of 44 African countries and argue that FDI play a significant role in achieving Sustainable Development Goals (SDGs) through their positive impact on basic infrastructure, water quality, sanitation, and renewable energy.

The benefits from FDI do not accrue automatically and depend on the host country's context and absorptive capacity. OECD (2002) discusses that some factors in developing countries may limit the full benefits of FDI inflows. These include, but are not limited to, the general level of education and health, technological development, insufficient openness to trade, and inadequate regulatory frameworks. That is, higher levels of technological and educational achievement as well as a better infrastructure improve the absorptive capacity of the host country and increase the benefit from FDI. Indeed, Borensztein et al. (1998) find that there are complementarities between FDI and human capital, so that the favorable growth impact of FDI relative to domestic investment is stronger at a higher level of domestic human capital.

What Drives FDI in Africa?

According to the literature on FDI, the key drivers of FDI include macroeconomic, political, and institutional factors. Islam and Beloucif (2023) provide a comprehensive overview of the literature on the key determinants of FDI through conducting a systematic literature review of 112 empirical studies across various countries and regions published between 2000 and 2018. They find that market size to be the most robust determinant, followed by trade openness, infrastructure quality, labor cost, macroeconomic stability, human capital, and the growth prospect of the host country. The World Bank's Global Investment Competitiveness Survey considers such factors as administrative and legal barriers, and World Bank (2018) finds that political stability and stable regulatory environment are the most important determinants for attracting investors. Weak legal protection against political and regulatory risks and lack of transparency in dealing with public agencies can impede foreign investment even if a host country offers favorable tax regime and competitive labor costs.

FDI flows to African countries are found to be sensitive to factors traditionally established as key determinants of FDI. Asiedu (2006) studies a sample of 22 SSA countries over the period of 1984-2000, and establishes that good infrastructure, an educated labor force, macroeconomic stability, openness to FDI, an efficient legal system, less corruption, and political stability do promote FDI in the region. The study also includes a measure of dependence on natural resources in the regression and finds that that countries that are endowed with natural resources are likely to attract more FDI. Bhattacharya et al. (2021) study the role of urbanization as an engine of economic development and a driver of FDI. They argue that a higher urbanization can help attract more FDI, and thus developing economies need to support urbanization, which will improve their investment climate.

Impact of CwA on Member Countries in Africa

Despite the relatively short time since the initiative's launch, a number of studies have already emerged examining its impact. Duodu et al. (2022) use the difference-in-difference (DiD) and triple difference methodologies to examine the causal impact of the initiative on FDI and environmental pollution on the sample spanning 2005-2019. The authors found that the CwA membership promoted both FDI and pollution in participating countries. Fleuriet and Vertier (2024) provide the first attempt at examining the success of the initiative. They estimate the effect of CwA on GDP per capita, demand side aggregates and FDI stock per capita using the synthetic differences methodology covering the period 2003-2021. Their results suggest a positive and statistically significant impact on GDP per capita, while the impact on other variables is either marginally significant or not significant. The authors note that the relatively short timeframe of the existence of the CwA and other shocks (e.g. COVID-19 pandemic) may have limited the ability of their empirical analysis to fully identify the effects of the CwA initiative. Finally, Gbadegesin and Yameogo (2024) evaluate the CwA initiative's impact on FDI, GDP per capita, gross capital formation, exports, and employment using targeted maximum likelihood estimation. Their empirical findings indicate that the initiative is associated with increased FDI and export growth in member countries, but these gains have not yet translated into broader economic growth improving gross capital formation and GDP per capita.

III. Methodology

To establish a causal link between CwA participation and FDI inflows, we face challenges of endogeneity and absence of a counterfactual. First, there may be factors that affect FDI inflows, which also make CwA member countries inherently different from non-CwA countries. On the other hand, it is difficult to predict the FDI inflows that would have emerged in CwA countries in the absence of the initiative. While DiD is a common approach for panel data analysis, it relies on the parallel trends assumption—that, in the absence of treatment, the treated and control groups would have followed similar trends over time. In our case, we do not observe evidence of parallel pre-treatment trends, limiting the validity of a DiD approach. In addition, as participation in the CwA is demand driven and not subject to any kind of a threshold indicator, we are unable to employ quasi-experimental techniques like Regression Discontinuity Design or Instrumental Variable approach.

Another common empirical strategy to overcome the two challenges raised above would be to apply matching methods that serve as preprocessing steps to improve covariate balance between treated and control groups prior to outcome estimation. In our analysis, we employ the entropy balancing methodology—a generalization of conventional matching methods proposed by Hainmueller (2012). We identify the impact of CwA on FDI inflows by comparing member countries to non-member countries which are as similar as possible in terms of observable characteristics that explain FDI inflows, while controlling for country and time-specific trends. Hainmueller (2012) discusses several advantages that entropy balancing offers relative to other matching methods. Entropy balancing is often more effective because it guarantees a high degree of balance on selected covariates, before estimating treatment effects. It avoids the randomness and loss of data that can occur with traditional matching, and it uses all available control units by assigning weights instead of discarding observations. This makes the results more stable and less sensitive to how the matches are chosen.[1]

Thus, entropy balancing allows us to achieve a high degree of covariate balance between treated and control units in a small sample (Balima and Sy, 2021). Furthermore, entropy balancing is more versatile than simple regression-based approaches or conventional matching methods as it is non-parametric, i.e. its use does not require specifying an empirical model for the participation in CwA, which is demand-driven.

While entropy balancing improves credibility of causal inference, it does not account for time-invariant unobservable confounders and common shocks across all of Africa in each time period not captured by the balancing variables. To address this concern, we complement entropy balancing with the inclusion of country and time fixed effects in the panel specification. Country fixed effects absorb time-invariant unobserved differences across countries such as geographic endowment which might simultaneously influence CwA participation and FDI inflows. At the same time, time fixed effects control for global or region-wide shocks that affect all countries in Africa in a given year such as global economic or financial developments. This identifying assumption is thus that covariates used in balancing, complemented by country and time fixed effects, sufficiently capture the selection into CwA and all relevant confounding factors affecting FDI inflows.

In the entropy balancing approach, participation in CwA from 2017 onwards represents the treatment variable and FDI inflows represent the outcome variable. The units of observation are country-year. The measure of interest we aim to estimate is the average treatment effect on treated (τ):

$$\tau = \mathrm{E}\left[FDI_{\{(1)\}} \mid \mathrm{P} = 1 \right] - \mathrm{E}\left[FDI_{\{(0)\}} \mid \mathrm{P} = 1 \right]$$

where FDI is the outcome variable measuring FDI inflows. P indicates if the unit of observation (country-year) is subject to the treatment 'participation in CwA' (P = 1) or not (P = 0). Consequently, $\mathrm{E}\left[FDI_{\{(1)\}} \mid \mathrm{P} = 1 \right]$ is the expected value of FDI inflows received by countries when participating in the CwA and $\mathrm{E}\left[FDI_{\{(0)\}} \mid \mathrm{P} = 1 \right]$ is

[1] Synthetic control and synthetic difference-in-differences (SDiD) are increasingly used to estimate causal effects in panel data settings. While synthetic control is well suited for case studies with a single treated unit and long pre-treatment outcome histories, SDiD extends this approach to settings with multiple treated units by incorporating both unit and time weights to relax the parallel trends assumption. Both methods rely heavily on the availability of rich pre-treatment outcome data and can become complex to implement, particularly with moderately sized samples. Given our focus on covariate-based selection into treatment and the structure of our data—with a moderate number of treated units and limited pre-treatment periods—we opt for entropy balancing, which provides exact balance on observed covariates, is computationally efficient, and offers greater transparency.

the counterfactual expected value of FDI inflow if they had not participated in CwA. Given that we cannot observe the latter, we attempt to identify an appropriate proxy.

If CwA participation was random, we could estimate τ by comparing FDI inflows in member vs. non-member countries between 2017 to 2023. However, joining the CwA may be endogenous to other factors. Therefore, we compare treated and control units that are as close as possible to each other with respect to observable characteristics that explain FDI inflows. Under this condition, the only difference that can explain the variation in FDI inflows between treated and control units is participation in CwA. The above equation is then re-written as:

$$\tau = \mathrm{E}\left[FDI_{\{(1)\}} \mid \mathrm{P} = 1, \mathrm{X} = x\right] - \mathrm{E}\left[FDI_{\{(0)\}} \mid \mathrm{P} = 0, \mathrm{X} = x\right]$$

where X = *x* is a vector of observable covariates that affect FDI inflows.

The identifying assumption remains that, conditional on observed covariates that have been used for the entropy balancing and fixed effects, CwA participation is independent of potential FDI outcomes. This is particularly relevant because participation in CwA is demand-driven, i.e., countries opt into the initiative voluntarily rather than being randomly assigned. As such, modeling the selection process parametrically would impose strong functional form assumptions. Entropy balancing provides a more flexible, non-parametric reweighting strategy that accommodates this self-selection by aligning observable covariates between groups.

We acknowledge the relatively smaller size of the treatment group (see next section and Annex), which may affect the stability of covariate moments and the robustness of inference. However, this limitation would similarly affect other empirical strategies, and entropy balancing remains a suitable approach given its ability to achieve exact covariate balance and make full use of the available control group.

To estimate τ, our methodology is based on a two-step approach. A first step computes weights for control units that satisfy pre-specified balance constraints. Following Neuenkirch and Neumeier (2016), the balance constraints impose equal covariate means across treated and control groups. By doing so, we ensure that the control group contains, on average, country-year observations that are as similar as possible to the treated group for the covariates.

The second step uses the weights from the first step in a regression analysis where FDI inflows as percent of GDP is the dependent variable and CwA dummy (compact member countries from 2017 onwards are recorded as 1; 0 otherwise) is the main explanatory variable. We control for country fixed effects, time fixed effects, and selected control variables (see Section V).

IV. Data

We use a panel dataset covering 42 countries in Africa over the period 1990-2023, including 10 members of the CwA group. The dependent variable is FDI per capita. The data on inward net FDI flows are from the UNCTAD database. These data provide the largest coverage in terms of number of countries and time span. The treatment variable is a dummy that takes the value 1 for countries that participate in the CwA initiative. These are Benin, Burkina Faso, Egypt, Ghana, Guinea, Morocco, Rwanda, Senegal, Togo and Tunisia for the years 2017-2023; otherwise, the variable takes the value 0.[2]

The selection of the control variables is based on the findings of the literature on FDI determinants. These cover three key areas:

(i) macroeconomic factors:

- *the return on capital*: countries with relatively scarce capital would have a higher marginal product of capital, according to the law of diminishing returns, and, hence, a higher return on capital. Following Asiedu (2002), we assume that the marginal product of capital (MPK) is equal to the return on capital, and we use the inverse of GDP per capita as its measure, which implies that that poorer countries tend to have a lower stock of capital, all else being equal. We also use a real interest rate as a measure of the return in capital in our robustness checks[3];
- *inflation*: we include CPI inflation as a measure of overall macroeconomic stability;
- *natural resource dependence*: we use data on the natural resource rent to measure the value of natural resources earned by a country from their extraction;
- *Gross Domestic Product (GDP):* we use the PPP weighted GDP in [international] U.S. dollars to capture the size of the economy.

(ii) economic and political institutions:

- *trade openness* is measured as the sum of exports and imports of goods and services as a share of GDP;

[2] Burkina-Faso and Togo joined the CwA initiative in 2018, the DRC joined in 2023 and Zambia in 2025. All other countries joined in 2017. We assume block treatment assignment in 2017 for all members, except the DRC and Zambia, which we include in the control group. Due to data availability constraints, the final model includes ten CwA countries; Côte d'Ivoire and Ethiopia were excluded because of missing data for some of the covariates.

[3] We acknowledge the Lucas Paradox, which highlights the empirical puzzle that capital does not flow from rich to poor countries as theory predicts. Some authors, such as Lowe et al. (2019), attempt to address this paradox by constructing direct estimates of the MPK, distinguishing between public and private components. While these estimates offer valuable insights, we rely on the inverse of GDP per capita and the real interest rate as simpler and more widely available proxies, given data limitations and the structural assumptions embedded in MPK estimation.

- *demographic characteristics*: we use the urbanization rate as an important demographic characteristic, following the findings of Bhattacharya et al. (2021) about complementarities between urbanization and FDI inflows;

- *financial sector development* is measured by the credit to private sector in percent of GDP;

- *institutional quality* measures include regulatory quality, political stability, control of corruption, and government effectiveness;

(iii) development characteristics:

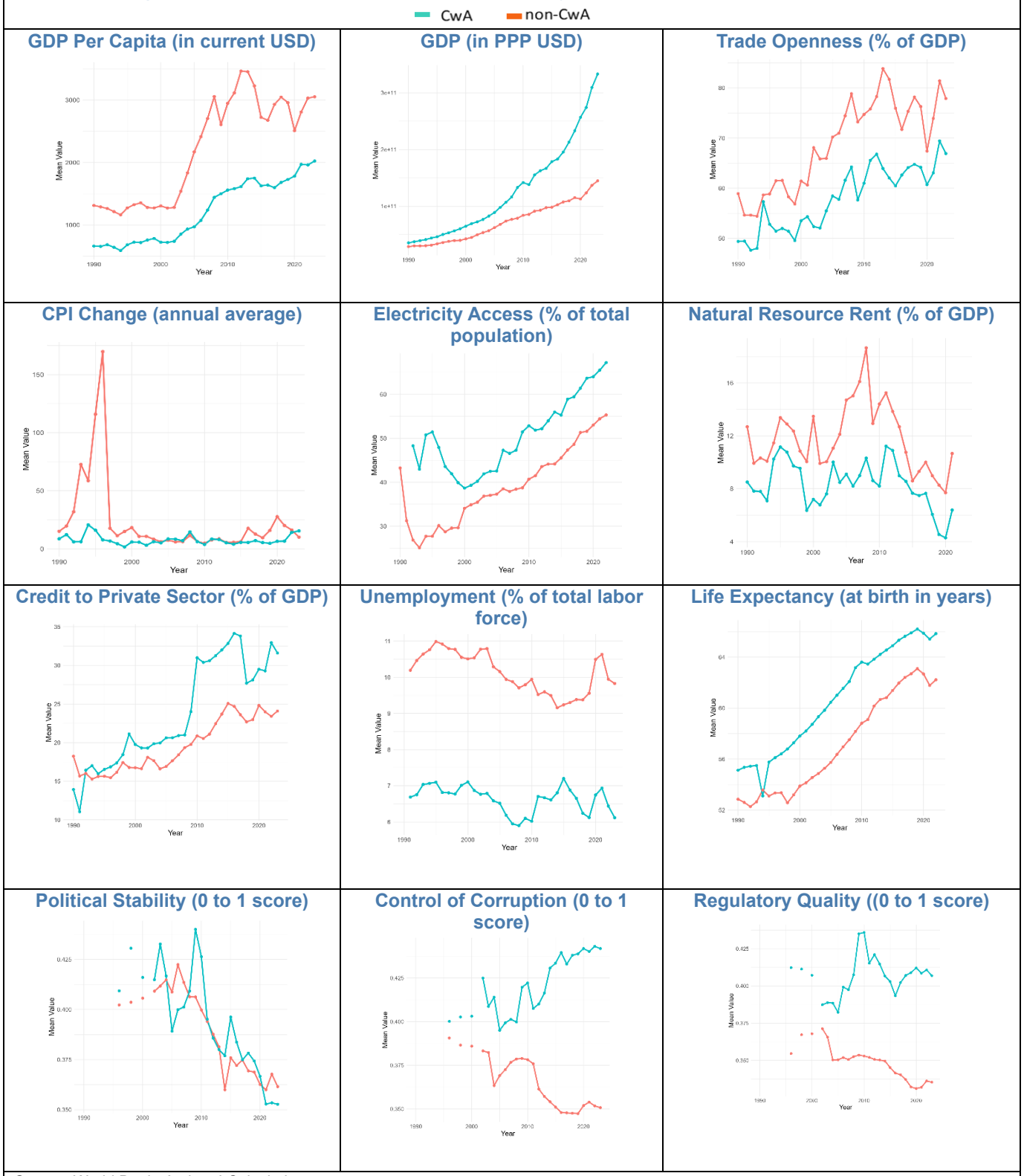
- *physical infrastructure*: we use access to electricity in percent of population as a measure of infrastructure development. Access to electricity is a fundamental need for basic activities and a strong indicator of a country's energy poverty status, impacting various aspects of life and economic growth.

- *human capital development* is measured by the life expectancy as an indicator of population's overall health and living conditions.

The data come from the World Bank Development Indicators and World Governance Indicators.

Figure 5 presents the group averages for the CwA and non-CwA countries across these measures of the economic and institutional determinants of FDI, covering the period 1990-2023. The visual inspection suggests that members of CwA tend to be larger economies on average, which is one of the key factors attracting foreign investors. At the same time, they tend to have on average lower endowments of natural resources, better infrastructure and human capital, and stronger institutions. These differences hold for both pre-CwA and post-CwA period.

Figure 5. CwA vs. non-CwA Countries on Key Variables that Impact FDI Inflows

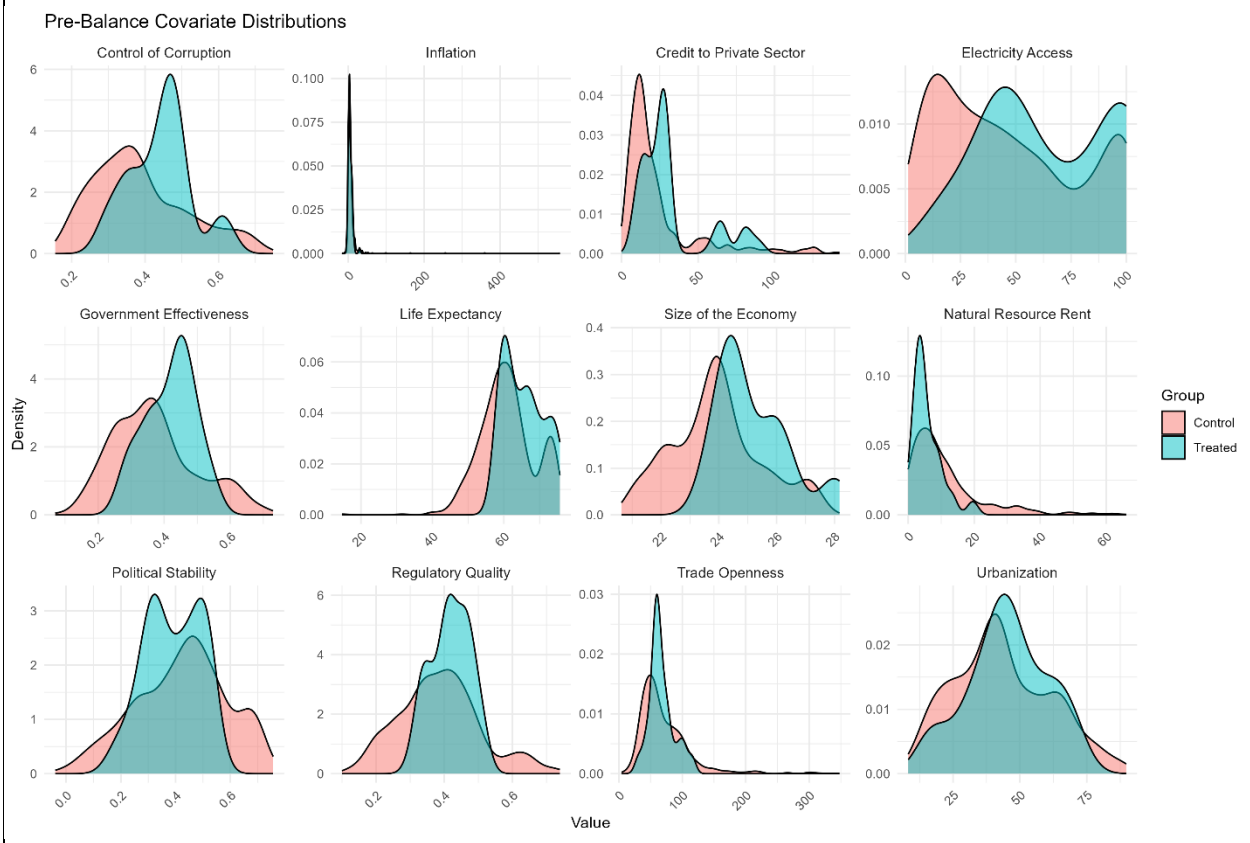


Source: World Bank, Authors' Calculations

V. Results

In step 1 of our empirical strategy, we aim to balance our sample using the variables described in the previous section. Figures 6 and 7 show the distributions of control (non-CwA) and treatment (CwA) countries pre- and post-balancing exercise. This first step verifies whether our strategy is effective in building a close counterfactual of non-CwA countries. Figure 6 presents original distributions of the two groups across selected characteristics and Figure 7 shows the distributions after reweighting the control group observations.

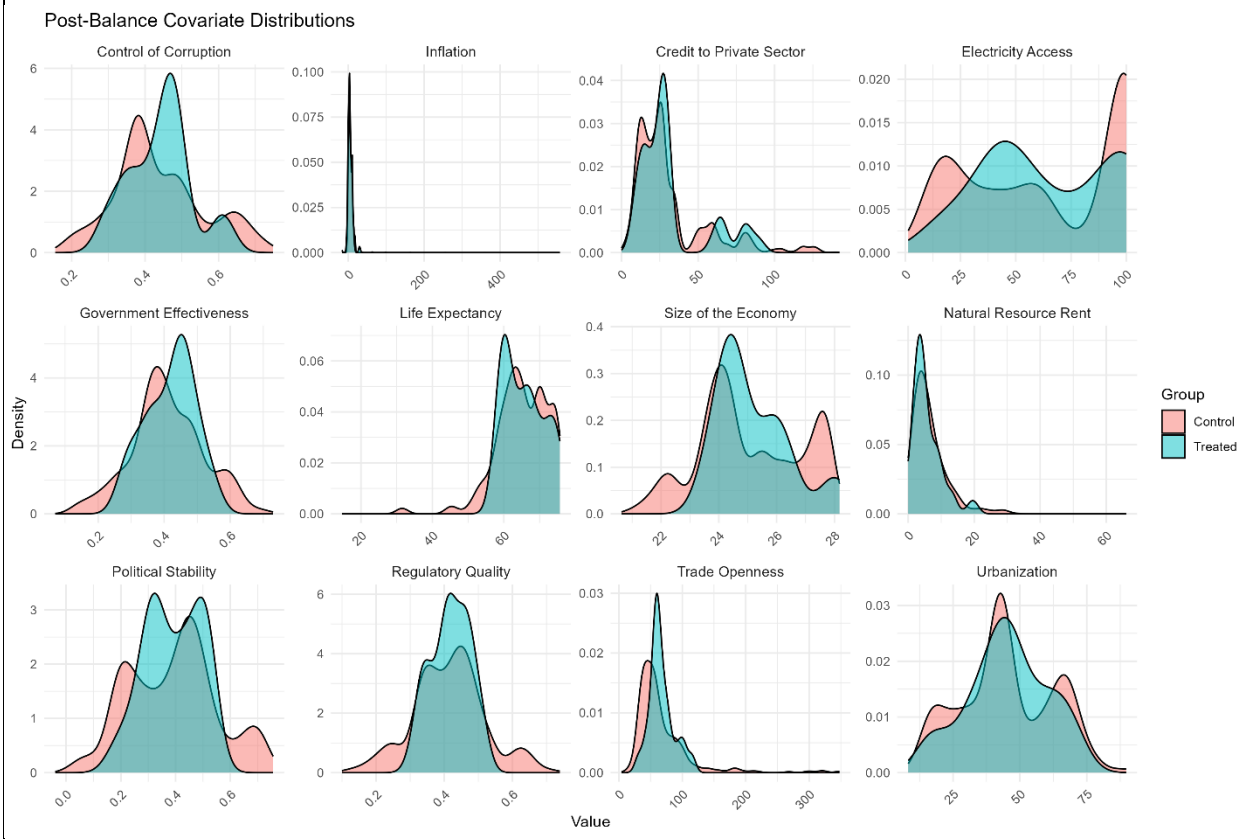
Figure 6. Pre-Balance Distributions Across Selected Control Variables



Source: World Bank Development Indicators and World Bank Governance Indicators; Authors' Calculations

Visual inspection of the two figures suggests that re-weighting has helped achieved a better balance across most covariates. To confirm this, we also conduct a Standardized Mean Difference (SMD) which measures the difference in means between treated and control group, scaled by the pooled standard deviation. This test provides a standardized metric to evaluate balance in covariates across the two groups and formally assesses whether entropy balancing successfully matched control group means to treatment group means across covariates (Table 1).

Figure 7. Post-Balance Distributions Across Selected Control Variables



Source: World Bank Development Indicators and World Bank Governance Indicators; Authors' Calculations

An SMD close to 0.1 and lower suggests good balance in means between treated and control groups after the re-weighting. This ensures that subsequently estimated treatment effects are less likely to be biased due to pre-CwA differences between the two groups on observable characteristics that affect FDI inflows.

Table 1. Standardized Mean Difference Test

Covariate	SMD
Urbanization	0.02
Life Expectancy	0.09
Inflation	0.07
Trade Openness	0.01
Electricity Access	0.05
Credit to Private Sector	0.05

Covariate	SMD
Natural Resource Rent	0.15
Size of Economy	0.11
Regulatory Quality	0.04
Political Stability	0.01
Control of Corruption	0.03
Government Effectiveness	0.09

Source: Authors' Calculations

In step 2, we use the weights from the entropy-balancing to regress Net FDI inflows as a percentage of GDP on CwA dummy. Due to high correlation between size of the economy, measured by GDP, and the return on investment (RoI), measured as the inverse of GDP per capita, which causes multicollinearity and restricts the entropy balancing optimization exercise, we exclude the RoI as one of the covariates on which we balance the treated and control groups. Given the theoretical importance of the RoI in determining investment decisions, we include this variable as a control variable in our two-way fixed effect regression, where the main equation is:

$$\mathrm{FDI}_{\{it\}} = \mathrm{CwA}_{\{it\}} + \mathrm{RoI}_{\{it\}} + \alpha_i + \gamma_t + \varepsilon_{\{it\}}$$

Our main result shows that the coefficient on the CwA dummy is positive and statistically significant (Table 2). This suggests that conditional on the identifying assumption, participation in Compact with Africa is associated with a statistically significant improvement in net FDI inflows when measured as a percentage of GDP. While these results may suggest the plausibility of a causal link, they should be interpreted with caution. We run a few robustness checks to assess sensitivity of these findings.

Table 2. Main Results on CwA Participation and Net FDI Inflows

Variable	Dependent Variable: Net FDI Inflows (as % of GDP)
CwA Participation	1.613*
	(0.628)
RoI	1.076
	(1.424)
Num.Obs.	748
RMSE	3.92
Std.Errors	by: Country
FE: Year	Yes
FE: Country	Yes

Note: * p < 0.05

Robustness checks

We consider two alternate specifications of the dependent variable — net FDI inflows per capita and net FDI inflows as a percentage of Gross Fixed Capital Formation (Table 3). In addition, we consider a model specification with a lagged dependent variable as a control variable (Table 4). Lastly, for the third robustness check, we use real interest rate as a proxy for return on capital with all three FDI outcome variables (Table 5) and including lagged dependent variable as a control (Table 6). The alternate equation considered for the robustness check is:

$$\mathrm{FDI}_{\{it\}} = \mathrm{CwA}_{\{it\}} + \{\mathrm{LagFDI}\}_{\{it\}} + \mathrm{RoI}_{\{it\}} + \alpha_i + \gamma_t + \varepsilon_{\{it\}}$$

where α_i and γ_t are country and time fixed effects, respectively, $FDI_{\{it\}}$ is the outcome variable (measured as net FDI inflows per capita and net FDI inflows as a percentage of Gross Fixed Capital Formation) and $RoI_{\{it\}}$ is the variable for return on investment (inverse of GDP per Capita and, alternatively, a real interest rate).

While the main specification yielded a positive and statistically significant association between CwA participation and FDI inflows, the results in Tables 3-6 show that our alternative specifications could not consistently establish a statistically significant result although the estimated coefficient on the CwA dummy remained positive in all model specification. Based on these findings, we are not able to establish a robust causal link between CwA participation and FDI inflows.

Table 3. Robustness with Alternate Net FDI Check Measure of Inflows

	Dependent Variable	
	FDI Inflows Per Capita	**FDI Inflow (as % of GFCF)**
CwA Participation	20.479	4.936*
	(16.044)	(2.069)
RoI	3.911	3.356
	(60.903)	(4.685)
Num.Obs.	748	748
RMSE	193.65	14.56
Std.Errors	by: Country	by: Country
FE: Year	Yes	Yes
FE: Country	Yes	Yes

Note: * p < 0.05

Table 4. Robustness Check with a Lagged Dependent Variable

	Dependent Variable: Net FDI Inflows		
	as % of GDP	**Per Capita**	**as % of GFCF**
CwA Participation	0.725+	4.662	2.868
	(0.413)	(11.767)	(1.764)
RoI	0.120	-6.171	1.931
	(0.896)	(35.726)	(3.745)
Lagged Dependent Variable	0.373**	0.543***	0.161
	(0.121)	(0.049)	(0.162)
Num.Obs.	706	706	706
RMSE	3.27	150.56	13.51
Std.Errors	by: Country	by: Country	by: Country
FE: Year	Yes	Yes	Yes
FE: Country	Yes	Yes	Yes

Note: + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 5. Robustness Check with the Real Interest Rate as Proxy for RoI

	Dependent Variable: Net FDI Inflows		
	as % of GDP	**Per Capita**	**as % of GFCF**
CwA Participation	1.241	11.891	3.848
	(0.868)	(9.749)	(3.136)
Real Interest Rate	-0.012	-0.037	-0.063
	(0.022)	(0.398)	(0.116)
Num.Obs.	484	484	484
RMSE	4.64	163.20	15.49
Std.Errors	by: Country	by: Country	by: Country
FE: Year	Yes	Yes	Yes
FE: Country	Yes	Yes	Yes

Table 6. Robustness Check with the Real Interest Rate and a Lagged Dependent Variable

	Dependent Variable: Net FDI Inflows		
	as % of GDP	**Per Capita**	**as % of GFCF**
CwA Participation	0.010	2.648	1.029
	(0.489)	(7.149)	(2.321)
Real Interest Rate	-0.012	-0.097	-0.078
	(0.022)	(0.388)	(0.107)
Lagged Dependent Variable	0.490***	0.282***	0.327**
	(0.086)	(0.064)	(0.112)
Num.Obs.	453	453	453
RMSE	3.74	124.79	14.36
Std.Errors	by: Country	by: Country	by: Country
FE: Year	X	X	X
FE: Country	X	X	X

Note: + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

VI. Discussion

Though the results point to a positive effect of CwA participation on FDI inflows, the estimated impact is not statistically significant. Based on these results, we could not establish a causal link between participation in CwA and FDI inflows. This may be due to several factors. On one hand, since the CwA aimed at promoting reforms of the macroeconomic and financial frameworks of participating countries, full implementation of such reforms may require time beyond the time span since the launch of the CwA initiative. Moreover, this period

was perturbed by a number of events, such as the outbreak of the COVID-19 pandemic, the escalation of geopolitical conflicts, which may have impacted FDI flows.

While it may be too early to establish a causal link between participation in the CwA initiative, the literature on drivers of FDI points to several empirical results, which may help inform policies. For example, empirical literature suggests that stronger institutions, reliable infrastructure, and a productive workforce create a favorable environment for FDI.

Infrastructure is a key factor in attracting foreign investment, as investors seek efficient transportation, energy, and digital connectivity. Strong infrastructure reduces operational costs and increases productivity, making investment more appealing.

Human development plays an important role in attracting foreign direct investment, as both health and education contribute to labor productivity and the overall investment climate. A healthy population supports workforce reliability ensuring long-term economic productivity, while a well-educated and skilled labor force is critical for sectors requiring technical expertise and innovation capacity. Although we were unable to include a direct measure of education, such as public spending or enrollment rates, due to data limitations, the literature consistently highlights the importance of human capital in attracting FDI inflows. Our analysis includes health indicators as a proxy, while acknowledging that the absence of education-related variables may understate the broader role of human development.

Furthermore, a stable legal framework, efficient regulatory bodies, and a corruption-free environment create investor confidence. Stable economic policies and regulatory frameworks helps reduce uncertainty for investors, ensuring policy continuity regardless of political changes.

In that vein, the CwA countries can leverage their membership in the initiative to strengthen institutional and policy frameworks. Countries can use the CwA as an exchange platform for peer-to-peer learning in several ways through sharing best practices, capacity building, policy dialogue and collaboration, join initiatives and data sharing. Countries can collaborate on cross-border infrastructure projects, trade agreements, and investment initiatives that benefit multiple economies. This enhances regional competitiveness and strengthens economic ties.

Moreover, through reforms fostering the investment-friendly environment, the initiative can support the private sector development in the CwA members and enhance its contribution to economic growth. Thus, the CwA membership can play an important role in engaging the private sector encouraging closer collaboration between governments, international partners and private enterprises.

For the G20, the CwA can provide a framework for countries to track progress, compare economic performance, and learn from data-driven insights. This can also help CwA member governments refine their policies and exchange insights on successful policy reforms, investment strategies, and regulatory improvements. Regular meetings and forums would allow governments of both FDI host and source countries to discuss economic strategies, learn from one another’s experiences, and refine their approaches to improving investment climate.

VII. Conclusion

Since its inception, the CwA aimed at helping its members strengthen financial stability, infrastructure development, and business-friendly policies in order to attract foreign investments which can further boost economic growth and development. The CwA member countries have indeed experienced an increase in FDI inflows during the period of CwA initiative. Our empirical analysis points to a positive effect of the participation in CwA on inward FDI, but this impact is not statistically significant. This can be explained by a relatively short time span after the launch of the initiative and a number of events which have impacted the global developments in recent years that may limit the effect of the CwA initiative.

While we could not formally establish statistically definitive results, our analysis offers other useful insights. CwA member countries have generally tended to have stronger institutions, better infrastructure and human development, which are among the key factors that help attract FDI to developing countries. Hence, continued efforts of African governments to implement structural reforms, strengthen institutions and governance, improve infrastructure and develop human capital, achieve macroeconomic stability and improve business environment need to be sustained. While official aid and international donor financing is expected to play an important role, further progress would not be possible without FDI inflows.

CwA has as the potential to be a knowledge-sharing platform that brings together governments, investors and international institutions. It can encourage peer-to-peer learning and implementation of reforms which can improve institutional frameworks and investment climate. It can also enhance economic cooperation and long-term partnerships between the private sector and governments to drive economic development.

To ensure its success in achieving key objectives, CwA would benefit from a strong coordination among G-20, participating African countries and multilateral partners. This includes establishing efficient communication channels among all involved. Equally important is the creation of a robust monitoring and evaluation framework, supported by consistent performance indicators to track progress and make informed adjustments. To foster continuous improvement, a regular discussion forum for information exchange, experience sharing, and mutual learning would create the needed collaborative setting. Such structured coordination and monitoring mechanisms are key for achieving meaningful and measurable outcomes over time.

Annex I

TABLE 1
Summary Statistics, 1990 – 2023 (42 countries)

Variables	*Mean*	*Std.Dev*	*Min*	*Max*
Dependent Variable: Net FDI/GDP (in percent)	3.627	4.994	-6.370	40.882
Dependent Variable: Net FDI per Capita (in US dollars)	110.948	292.435	-731.997	2625.599
Dependent Variable: Net FDI /GFCF (in percent)	15.529	17.469	-68.211	95.641
Macroeconomic factors				
Return on Capital (Real Interest Rate) (in percent)	-7.216	1.097	-9.810	-4.830
Inflation (in percent)	7.599	27.482	-16.860	557.202
Natural Resource Rent (in percent of GDP)	10.810	10.844	0.002	66.060
GDP per Capita (in current US dollars)	5291.666	6016.051	291.989	34219.060
Nominal GDP (PPP weighted in billion US dollars)	76.479	182.935	0.274	2121.760
Economic and Political Institutions				
Trade Openness (in percent of GDP)	70.578	40.101	4.128	347.997
Urbanization	43.445	17.924	8.246	89.741
Credit to Private Sector (in percent of GDP)	24.233	25.845	0.003	142.422
Regulatory Quality	0.389	0.118	0.100	0.739
Political Stability	0.420	0.164	-0.040	0.757
Control of Corruption	0.390	0.128	0.155	0.749
Government Effectiveness	0.373	0.127	0.070	0.730
Development Factors				
Electricity Access (in percent of total population)	47.752	31.713	1.300	100.000
Life Expectancy (in years)	61.229	7.347	41.681	76.593

TABLE 2
List of countries included in the model

CwA members	*Non-CwA members*
Benin	Algeria
Burkina Faso	Angola
Egypt	Botswana
Ghana	Burundi
Guinea	Cabo Verde
Morocco	Cameroon
Rwanda	Central African Republic
Senegal	Chad
Togo	Comoros
Tunisia	Djibouti
	Equatorial Guinea
	Eswatini
	Gabon
	Gambia
	Guinea-Bissau
	Kenya
	Lesotho
	Libya
	Madagascar
	Mali
	Mauritania
	Mauritius
	Mozambique
	Namibia
	Niger
	Seychelles
	Sierra Leone
	South Africa
	South Sudan
	Uganda
	Zambia
	Zimbabwe

References

Aust, V., Morais, A.I., Pinto, I., 2020, “How does foreign direct investment contribute to Sustainable Development Goals? Evidence from African countries,” Journal of Cleaner Production, Volume 245, https://doi.org/10.1016/j.jclepro.2019.118823.

Amighini, A., McMillan M., Sanfilippo, M., 2017, « FDI and capital formation in developing economies : New evidence from industry-level data”, NBER Working Paper, 23049, https://www.nber.org/system/files/working_papers/w23049/w23049.pdf

Asiedu, E. (2002), "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?" World Development, Vol. 30 (1), pp. 107-119, ISSN 0305-750X, https://doi.org/10.1016/S0305-750X(01)00100-0

Asiedu, E. (2006), Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. World Economy, 29: 63-77. https://doi.org/10.1111/j.1467-9701.2006.00758.x

Ayenew, B. B. (2022). The effect of foreign direct investment on the economic growth of Sub-Saharan African countries: An empirical approach. Cogent Economics & Finance, 10(1). https://doi.org/10.1080/23322039.2022.2038862

Balima, H., Sy, A. (2019). The Impact of Bailouts on the Probability of Sovereign Debt Crises: Evidence from IMF-Supported Programs. IMF Working Paper No. 19/2, Available at SSRN: https://ssrn.com/abstract=3333743

Bhattacharya, M., Behera, S. R., Dash, D. P., & Apergis, N. (2023). FDI Inflows and Urbanization: A Cross-country Comparison from Asia, Africa and Latin America. *Global Business Review*, 0(0). https://doi.org/10.1177/09721509231185829

Bodman, P., & Le, T. (2011). Assessing the roles that absorptive capacity and economic distance play in the foreign direct investment-productivity growth nexus. *Applied Economics*, *45*(8), 1027–1039. https://doi.org/10.1080/00036846.2011.613789

Emako, E., Nuru, S., & Menza, M. (2023). The effect of foreign direct investment on capital accumulation in developing countries. Development Studies Research, 10(1). https://doi.org/10.1080/21665095.2023.2220580

Duodu, E., Oteng-Abayie, E.F., Frimpong, P.B. and Takyi, P.O. (2022), "The impact of the Compact with Africa initiative on foreign direct investments and environmental pollution", Management of Environmental Quality, Vol. 33 No. 6, pp. 1457-1475. https://doi.org/10.1108/MEQ-01-2022-0011

Fleuriet, V., Vertier, P. (2024), “Does the G20 compact with Africa foster economic growth: Evidence from synthetic differences,” *Economics Letters*, 236.

Gbadegesin, T.K., Yameogo, N.D. (2024). Evaluating the Economic Impacts of the G20 Compact Initiative: Evidence from Causal Inference Using Advanced Machine Learning Techniques. *Journal of Sustainable Development*; Vol. 17, No. 5. DOI:10.5539/jsd.v17n5p56

Hainmueller, J. (2012). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies, Political Analysis, 20, 25-46.

Islam, M. S., Beloucif, A. (2023), “Determinants of Foreign Direct Investment: A Systematic Review of the Empirical Studies,” Foreign Trade Review, Vol. 59 (2), pp. 309-227. https://journals.sagepub.com/doi/pdf/10.1177/00157325231158846

Lowe, M., Papageorgiou, C. and Perez-Sebastian, F. (2019), “The Public and Private Marginal Product of Capital.” Economica, Vol. 86, pp. 336-361. https://doi.org/10.1111/ecca.12268.

OECD (2002), Foreign Direct Investment for Development: Maximising benefits, minimising costs, OECD Publishing, Paris, https://doi.org/10.1787/9789264199286-en.

World Bank. 2018. Global Investment Competitiveness Report 2017/2018: Foreign Investor Perspectives and Policy Implications. Washington, DC: World Bank. doi:10.1596/978-1-4648-1175-3. License: Creative Commons Attribution CC BY 3.0 IGO

PUBLICATIONS